

Appl. No.: 09/425,804  
Response dated May 20, 2003  
Office Action 3/13/2003

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of claims:**

Claims 1-14 (withdrawn)

Claim 15 (currently amended): An aptamer ~~specific for that binds to one or more NF-kB/Rel proteins or constituents thereof essentially homologous to the sequences of oligonucleotides in the selected from the~~ group consisting of:

- a) single stranded oligonucleotides identified by SEQ ID NO.: ~~17~~ 39, wherein between one and six of the nucleotides are dithiophosphates;
- b) double stranded oligonucleotides in accordance with the sequence identified by SEQ ID NO.: ~~1739~~, wherein between one and ten of the nucleotides are dithiophosphates;
- c) single stranded oligonucleotides identified by SEQ ID NO.: ~~2939~~, wherein between one and six of the nucleotides are dithiophosphates; and
- d) double stranded oligonucleotides in accordance with the sequence identified by SEQ ID NO.: ~~2939~~, wherein between one and ten of the nucleotides are dithiophosphates.

Claim 16 (currently amended): The aptamer of claim 15, ~~essentially homologous to and having the thioate and sequence~~ substitutions of the oligonucleotides identified by SEQ ID NO.: 30 - 39.

Claim 17 (currently amended): The aptamer of claim 15, ~~essentially homologous to an oligonucleotide having the~~ sequence of the formula:

5'-CCAGGAGAT<sub>S2</sub>T<sub>S2</sub>CCAC-3'

3'-GG<sub>S2</sub>TCC<sub>S2</sub>TC<sub>S2</sub>TAAGG<sub>S2</sub>TG-5' (SEQ ID NO.: 39).

Claims 18-39 (withdrawn)

Appl. No.: 09/425,804  
Response dated May 20, 2003  
Office Action 3/13/2003

Claim 40 (new): The aptamer of claim 15, further comprising one or more pharmaceutically acceptable salts.

Claim 41 (new): The aptamer of claim 15, further comprising a diluent.

Claim 42 (new): The aptamer of claim 15, wherein the aptamer is achiral.

Claim 43 (new): The aptamer of claim 15, wherein the one or more NF-kB/Rel proteins comprises an NF-kB homodimer.

Claim 44 (new): The aptamer of claim 15, wherein the one or more NF-kB/Rel proteins comprises an NF-kB heterodimer.

Claim 45 (new): The aptamer of claim 15, further comprising an NF-kB/Rel protein bound to the aptamer.

Claim 46 (new): The aptamer of claim 15, wherein the aptamer comprises one or more achiral thiomonophosphates.

Claim 47 (new): The aptamer of claim 15, wherein the aptamer comprises one or more dithiophosphates.

Claim 48 (new): A partially thio-modified aptamer that binds to an NF-kB/Rel protein.

Claim 49 (new): The aptamer of claim 48, wherein the NF-kB/Rel protein comprises a human NF-kB.

Claim 50 (new): The aptamer of claim 48, wherein the NF-kB/Rel protein comprises an NF-kB homodimer.

Claim 51 (new): The aptamer of claim 48, wherein the NF-kB/Rel protein comprises an NF-kB heterodimer.

Claim 52 (new): The aptamer of claim 48, wherein the aptamer comprises one or more thio-modifications as set forth in SEQ ID NOS.: 32, 33 and 38.

Claim 53 (new): The aptamer of claim 48, wherein the aptamer further comprises a fluorescent label.

Appl. No.: 09/425,804  
Response dated May 20, 2003  
Office Action 3/13/2003

**Claim 54 (new):** The aptamer of claim 48, further comprising one or more pharmaceutically acceptable salts.

**Claim 55 (new):** The aptamer of claim 48, further comprising a diluent.

**Claim 56 (new):** The aptamer of claim 48, wherein the aptamer is achiral.

**Claim 57 (new):** A partially thio-modified aptamer that binds to a human NF-kB protein complex.